

WHAT IS CLAIMED IS:

1. A mobile communication terminal comprising:  
a receiving section which receives, from a base  
station to which the terminal is connected via a radio  
channel, first position information representing the  
position of the base station;

a position sensing section which senses second  
position information representing the position of the  
terminal;

a distance computing section which calculates a  
distance from the base station to the terminal on the  
basis of the first position information received by  
said receiving section and the second position  
information sensed by said position sensing section;  
and

a determining section which determines whether a  
handoff is needed on the basis of the distance  
calculated by the distance computing section.

2. The mobile communication terminal according to  
claim 1, wherein position sensing section includes a  
satellite signal receiving section which receives a  
signals from a plurality of distance measuring  
satellites, and a position computing section which  
calculates the position of the terminal on the basis of  
the signals from said plurality of distance measuring  
satellites received by the satellite signal receiving  
section.

3. The mobile communication terminal according to claim 1, wherein said determining section compares the distance calculated by said distance computing section with a predetermined threshold value and, on the basis of the result of the comparison, determines whether a handoff is needed.

4. The mobile communication terminal according to claim 1, wherein said determining section includes a threshold value setting section which sets variably a threshold value corresponding to the radio communication area each base station covers, and a comparing section which compares the distance calculated by said distance computing section with the threshold value set by said threshold value setting section and, on the basis of the comparison, determines whether a handoff is needed.

5. The mobile communication terminal according to claim 4, wherein said threshold value setting section extracts information representing the size of the radio communication area the base station covers from the system information transmitted from the base station and, on the basis of the extracted information, sets the threshold value corresponding to the base station.

6. The mobile communication terminal according to claim 4, wherein said threshold value setting section has a first memory which stores the information representing the size of the radio communication area

the base station covers in such a manner that the information corresponds to identification information about each base information, and on the basis of the identification information about the base station to which the terminal is connected, reads the information representing the size of the radio communication area corresponding to the base station from the first memory and, on the basis of the read-out information, sets the threshold value corresponding to the base station.

7. The mobile communication terminal according to claim 4, wherein said threshold value setting section has a second memory which stores the threshold value preset according to the radio communication area the base station covers in such a manner that the threshold value corresponds to each piece of identification information about a plurality of base stations, and on the basis of the identification information about the base station to which the terminal is connected, reads the threshold value corresponding to the base station from said memory.

8. The mobile communication terminal according to claim 1, wherein said determining section includes a sensing section which senses the movement speed of the terminal, a setting section which sets a determining period according to the movement speed sensed by the sensing section, and a determination executing section which determines whether a handoff is needed

periodically according to the determining period set by the setting section.

9. A mobile communication terminal comprising:

5 a receiving section which receives, from a base station to which the terminal is connected via a radio channel, first position information representing the position of the base station;

10 a position sensing section which senses second position information representing the position of the terminal;

15 a distance computing section which calculates a distance from the base station to the terminal on the basis of the first position information received by said receiving section and the second position information sensed by said position sensing section;

a determining section which, determines whether a handoff is needed on the basis of the distance calculated by the distance computing section; and

20 a handoff executing section which executes a handoff process when said determining section has determined that a handoff is needed.

25 10. The mobile communication terminal according to claim 9, wherein said handoff executing section permits a second handoff process after a predetermined waiting time has elapsed since a first handoff process was executed.

11. The mobile communication terminal according to

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claim 9, wherein when the mobile communication terminal  
can be selectively connected via a radio channel to a  
base station in a first mobile communication system and  
a base station in a second mobile communication system  
5 using a radio communication scheme different from that  
of said first mobile communication system, said handoff  
executing section, if the determining section has  
determined that the handoff is needed, executes a first  
handoff process of switching the connection of the  
10 terminal from the base station in said first mobile  
communication system to which said mobile communication  
terminal is now connected to the base station in said  
second mobile communication system.

12. The mobile communication terminal according to  
15 claim 9, wherein when the mobile communication terminal  
can be selectively connected via the radio channel to a  
plurality of base stations belonging to the same mobile  
communication system, said handoff executing section,  
if said determining section has determined that the  
20 handoff is needed, executes a second handoff process of  
switching the connection of the terminal from the base  
station to which said mobile communication terminal is  
now connected to another neighboring base station  
belonging to the same mobile communication system.

25 13. A handoff control method comprising:

causing a base station to notify a mobile  
communication terminal of first position information

representing the installation position of the base station;

causing the mobile communication terminal to sense second position information representing the position where the mobile communication terminal exists;

calculating the distance between said base station and said mobile communication terminal on the basis of said notified first position information and said sensed second position information; and

determining on the basis of the calculated distance whether a handoff is needed.

14. A handoff control method comprising:

causing a base station to notify a mobile communication terminal of first position information representing the installation position of the base station;

causing the mobile communication terminal to sense second position information representing the position where the mobile communication terminal exists;

calculating the distance between said base station and said mobile communication terminal on the basis of said notified first position information and said sensed second position information;

determining on the basis of the calculated distance whether a handoff is needed; and

executing a handoff process of switching the base station to which the mobile communication terminal is

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now connected to another one if it has been determined that a handoff is needed.

15. The handoff control method according to claim 14, further comprising permitting a second  
5 handoff process to be executed after a predetermined waiting time has elapsed since a first handoff process was executed.

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